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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,579	06/04/2001	Martin Hellmark	34650-00517USPT	5679

7590 04/08/2005

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EXAMINER

DEAN, RAYMOND S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,579

Applicant(s)

HELLMARK ET AL.

Examiner

Raymond S Dean

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Soliman (US 6,785,249).

Regarding Claim 1, Soliman teaches a method for improving open loop power control in spread spectrum telecommunications systems, the method comprising the steps of: transmitting at least one first access channel probe for a first message from a mobile station to a base station (Column 8 lines 32 – 43), the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level (Column 8 lines 32 – 43); storing the first transmission power level at the mobile station (Column 8 lines 32 – 43, the power level of the first access probe of each sequence will be based on the nominal open-loop power level thus there will be a storage of said

Art Unit: 2684

nominal power level so that said nominal power level will be known at all times); and transmitting at least one second access channel probe for a second message from the mobile station to the base station (Column 8 lines 32 – 43), the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level stored in the mobile station; and wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe (Column 8 lines 32 – 43).

Regarding Claim 10, Soliman teaches an apparatus for improving open loop power control in spread spectrum telecommunications systems, the apparatus comprising: at least one memory for storing a first transmission power level of a specific access channel probe of at least one first access channel probe for a first message transmitted from a mobile station to a base station (Column 8 lines 32 – 43, the power level of the first access probe of each sequence will be based on the nominal open-loop power level thus there will be memory for storage of said nominal power level so that said nominal power level will be known at all times), the specific access channel probe of the at least one first access channel probe being the first access channel probe to receive an acknowledgment from the base station (Column 8 lines 32 – 43); and at least one processor for determining a second transmission power level of an initial access channel probe of at least one second access channel probe for a second message to be transmitted from the mobile station to the base station (Column 8 lines 32 – 43, there will be a processor for determining the power level of the first access probe of each

Art Unit: 2684

access probe sequence), the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being determined based upon first transmission power level stored in memory; and wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe (Column 8 lines 32 – 43).

Regarding Claim 19, Soliman teaches an article of manufacture for improving open loop power control in spread spectrum telecommunications systems, the article of manufacture comprising: at least one processor readable carrier; and instructions carried on the at least one carrier; wherein the instructions are configured to be readable from the at least one carrier (Column 8 lines 32 – 43, the mobile station receives instructions to access the network when the user of the mobile station presses the send button, the processor readable carrier is the signal generated when the send button is pushed, said signal instructs said mobile station to enter the access attempt mode) by at least one processor and thereby cause the at least one processor to operate so as to: transmit at least one first access channel probe for a first message from a mobile station to a base station (Column 8 lines 32 – 43), the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level (Column 8 lines 32 – 43); store the first transmission power level at the mobile station (Column 8 lines 32 – 43, the power level of the first access probe of each sequence will

Art Unit: 2684

be based on the nominal open-loop power level thus there will be a storage of said nominal power level so that said nominal power level will be known at all times); and transmit at least one second access channel probe for a second message from the mobile station to the base station (Column 8 lines 32 - 43), the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level stored in the mobile station; and wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe (Column 8 lines 32 – 43).

Regarding Claims 2, 11, 20, Soliman teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further inherently teaches storing a recently measured received code power from the base station at the mobile station, the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured received code power (Column 8 lines 32 – 43, it is well established in the art that that the nominal open-loop power level is determined using a path loss estimate between the mobile station and the base station, said path loss estimate is determined by the base station transmitting a pilot signal at a particular power level (code power) and subtracting said code power from the transmitted power level of said mobile station, using said path loss estimate and a target signal to interference ratio (SIR) a nominal power level will be set, there is therefore an inherent storage of received code power).

Regarding Claims 3, 12, 21, Soliman teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further inherently teaches storing a recently measured base station interference level at the mobile station, the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured base station interference level (Column 8 lines 32 – 43, it is well established in the art that that the nominal open-loop power level is determined using a path loss estimate between the mobile station and the base station, said path loss is determined by the base station transmitting a pilot signal at a particular power level (code power) and subtracting said code power from the transmitted power level of said mobile station, using said path loss estimate and a target signal to interference ratio (SIR), which includes the base station interference level, a nominal power level will be set, there is therefore an inherent storage of the base station interference level).

Regarding Claims 4, 13, 22, Soliman teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the first message is a first packet and the second message is a second packet in a packet mode transmission (Column 3 lines 45 – 65).

Regarding Claim 5, 14, 23, Soliman teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is based upon a path loss between the mobile station and the base station (Column 9 lines 5 – 20).

Regarding Claims 6, 15, 24, Soliman teaches all of the claimed limitations recited in Claims 5, 14, 23. Soliman further teaches wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is further based upon a base station interference level (Column 9 lines 5 – 20).

Regarding Claims 7, 16, 25, Soliman teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 8 lines 32 – 43, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the transmission power level required for acknowledgement, this means that the power level of the second access probe can be closer to said required power level due to the nature of the electronics).

Regarding Claims 8, 17, 26, Soliman teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 8 lines 32 – 43, the fact that there are electronic circuits involved in

transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the required power level, this means that the power level of the second access probe can be closer to said required power level due to the nature of the electronics).

Regarding Claim 9, Soliman teaches all of the claimed limitations recited in Claim 1. Soliman further teaches wherein the transmission power level of the second message is at or slightly above a transmission power level that is required to have the second message reach the base station (Column 8 lines 32 – 43, the actual transmit power of said mobile station will vary from the required power level due to the nature of the electronic circuits thus said actual transmit power can be at or slightly above said required power level).

Regarding Claim 18, 27, Soliman teaches all of the claimed limitations recited in Claims 10, 19. Soliman further teaches wherein the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is at or slightly above a transmission power level that is required to have the second message reach the base station (Column 8 lines 32 – 43, the actual transmit power of said mobile station will vary from the required power level due to the nature of the electronic circuits thus said actual transmit power can be at or slightly above said required power level).

Conclusion

Art Unit: 2684

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**NICK CORSARO
PRIMARY EXAMINER**



**Raymond S. Dean
March 28, 2005**